

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of positioning ~~a catheter~~an elongate treatment device proximate to a junction in a hollow anatomical structure of a patient, the method comprising the steps of:

introducing ~~a catheter~~the treatment device into the hollow anatomical structure,
the treatment device comprising an elongate shaft and an electrically driven energy application device at a working end of the shaft;

identifying the junction in the hollow anatomical structure ~~based on feedback from the catheter without imaging the hollow anatomical structure~~by emitting light via a fiber optic device positioned in the hollow anatomical structure;

positioning the working end of the ~~catheter~~treatment device proximate the junction identified in the step of identifying;

applying energy to the hollow anatomical structure proximate the junction at the treatment site via an ~~the~~ energy application device ~~at the working end of the catheter~~ so as to lead to a reduced diameter for the hollow anatomical structure.

2. (Original) The method of claim 1 wherein the junction in the step of identifying is the sapheno-femoral junction.

3. (Currently Amended) The method of claim 1 wherein ~~the feedback in the step of identifying is light emitted from a fiber optic device, and an attribute of the light changes upon~~ the fiber optic device reaching the junction of the hollow anatomical structure.

4. (Currently Amended) The method of claim 31 wherein the step of introducing the ~~treatment device~~catheter further includes the step of introducing the ~~treatment device~~catheter over the fiber optic device.

5. (Original) The method of claim 3 further including the step of measuring the length of the fiber optic device introduced into the patient until the attribute of the light changes.

6. (Original) The method of claim 5 further including the step of removing the fiber optic device after the step of measuring.

7. (Currently Amended) The method of claim 5 wherein the step of positioning further includes the step of inserting the ~~catheter~~treatment device for the same length as measured in the step of measuring the length of the fiber optic device.

8-15. (Cancelled)

16. (Currently Amended) The method of claim 1 wherein ~~the source of the feedback in the step of identifying includes introducing said treatment device comprises introducing said treatment device over a guidewire with~~ a hook shaped tip located at the distal end of a guide wire, wherein ~~the guide wire traverses a lumen in the catheter,~~ and the hook shaped tip is adaptable to ~~be engage~~ the junction of the hollow anatomical structure while the ~~catheter treatment device~~ travels over the guidewire to the junction.

17-20. (Cancelled)

21. (Currently Amended) The method of claim 1 wherein the step of introducing the ~~catheter treatment device~~ further includes the step of introducing the treatment device ~~catheter~~ over a guide wire; wherein ~~the feedback in the step of identifying includes an ultrasound signal generated by the guide wire.~~

22-49. (Cancelled)

50. (Previously Presented) A method of positioning a catheter within a hollow anatomical structure, the method comprising the steps of:

introducing a guide wire having a hook-shaped tip into the hollow anatomical structure;

hooking the hook-shaped tip of the guide wire to an ostium of a junction within the hollow anatomical structure;

introducing a catheter having a working end into the hollow anatomical structure over the guide wire;

positioning the working end of the catheter proximate the junction identified in the step of hooking; and

applying energy to the hollow anatomical structure at the treatment site via an energy application device at the working end of the catheter to heat but not cut the hollow anatomical structure until the hollow anatomical structure durably assumes a smaller size such that the reduced diameter of the hollow anatomical structure effectively ligates the hollow anatomical structure.

51. (Original) The method of claim 50 wherein the junction in the step of hooking is the sapheno-femoral junction.

52. (Original) The method of claim 50 wherein the step of positioning further includes the step of stopping the advancement of the catheter by a mechanical stop located proximal to the hook shaped tip of the guide wire.

53. (Original) The method of claim 50 further comprising the step of measuring the length of the guide wire introduced into the patient in the step of hooking.

54-69. (Cancelled)

70. (Previously Presented) The method of claim 1 wherein the step of applying energy heats but does not cut the hollow anatomical structure wherein the reduced diameter of the hollow anatomical structure results in occlusion of the hollow anatomical structure.

71. (Currently Amended) The method of claim ~~[[35]]~~1, ~~wherein further comprising the step of applying energy to the hollow anatomical structure at the treatment site via an energy application device at the working end of the catheter so as to lead to a reduced diameter for the hollow anatomical structure and effectively ligate~~ effectively ligates the hollow anatomical structure.

72. (Currently Amended) The method of claim ~~[[71]]~~1 wherein the reduced diameter of the hollow anatomical structure results in occlusion of the hollow anatomical structure.

73-74. (Cancelled)

75. (New) The method of claim 1, wherein the energy application device comprises a plurality of electrodes.

76. (New) The method of claim 1, wherein the energy application device comprises a resistive coil.

77. (New) The method of claim 1, wherein the fiber optic device is an integrated part of the treatment device.

78. (New) A method of positioning a device for application of therapeutic energy to a target portion of a hollow anatomical structure, the method comprising:

emitting light from within a hollow anatomical structure;

monitoring the light from outside the hollow anatomical structure to determine information about the location of a junction between a target portion and a region adjacent the hollow anatomical structure;

introducing a catheter having a working end into the hollow anatomical structure, the catheter having a therapeutic energy device at the working end, the therapeutic energy device distinct from the light;

using the information to position the therapeutic energy device near the junction;
and

applying energy from the therapeutic energy device to the target portion.

79. (New) The method of claim 78, wherein the therapeutic energy device is positioned separately from the light.

80. (New) The method of claim 78, further comprising the step of expanding the therapeutic energy device to provide physical engagement with the hollow anatomical structure.

81. (New) The method of claim 80, wherein the step of expanding occurs after the step of using the information to position the therapeutic energy device.

82. (New) The method of claim 78, wherein the hollow anatomical structure is a blood vessel.

83. (New) The method of claim 78, wherein the hollow anatomical structure is the saphenous vein, the sapheno-femoral junction, and the femoral vein.

84. (New) The method of claim 78, wherein the target portion is the saphenous vein.

85. (New) The method of claim 78, wherein the light is a fiber optic device.

86. (New) The method of claim 85, wherein the fiber optic device is configured to emit light in a radial fashion.

87. (New) The method of claim 78, wherein the therapeutic energy device is an electrode device.

88. (New) The method of claim 78, wherein the catheter comprises the light.

89. (New) A method of positioning a device for application of therapeutic energy to a target portion of a hollow anatomical structure, the method comprising:

emitting visual feedback light from a visual feedback device positioned within a hollow anatomical structure;

monitoring the visual feedback light from outside the hollow anatomical structure to determine information about the location of a junction between a target portion and a non-target portion of the hollow anatomical structure;

introducing, into the hollow anatomical structure, a catheter having a therapeutic energy device at the catheter's working end, the therapeutic energy device distinct from the visual feedback device;

using the information to position the therapeutic energy device near the junction and prevent the therapeutic energy device from extending into the non-target portion; and applying energy from the therapeutic energy device to the target portion.

90. (New) The method of claim 89, wherein therapeutic energy device is positioned separately from the visual feedback light.

91. (New) The method of claim 89, wherein the target portion is the saphenous vein.

92. (New) The method of claim 89, wherein the non-target portion is the femoral vein.

93. (New) The method of claim 89, wherein the visual feedback device is configured to emit light in a radial fashion.

94. (New) The method of claim 89, wherein the catheter comprises the visual feedback light.